Office
of
Coastal Resource Management
SCDHEC
Survey of Coastal Dock Owners' Perceptions of Docks

The Joseph P. Riley, Jr. Institute for Urban Affairs and Policy Studies

College of Charleston

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Executive Summary

This is a report of a random household telephone survey conducted in the winter of 2001 of private, non-commercial dock owners residing in eight South Carolina coastal counties concerning their opinions about the use of docks and policy matters related to docks. The survey includes 423 households, giving the data an error margin of ±4.7 percent at the .05 level of confidence. Because of the logistics of the survey, most of the contacted population resides in Beaufort, Charleston and Georgetown Counties. The surveyed population better reflects what is known about the distribution of docks on the South Carolina coast than the population more generally. Dock owning households participating in the study are about evenly divided among those who reported their docks were dry, those who reported having 1 – 4 feet of water, and those reporting in excess of 4 feet of water at low tide. Nearly two-thirds reported that their dock was located on a body of water wider than 50 feet.

Major findings:

- Broadly, households that own docks appear more tolerant of governmental control of docks. One possible interpretation of this phenomenon is that since they already have a dock, they would like to see future dock construction restricted. Another possible explanation is that they better understand the need to control docks since they are closer to the issue.
    - Two out of three respondents think that society should regulate when and where private docks can be built.
- More than one half of those who think that society should regulate the construction of private docks think that local government should do it.
- An overwhelming majority, three out of four dock owning households, think that restrictions should be placed on the length of docks.
- Close to four out of five respondents think that restrictions should be placed on the size of docks.
- One third of the respondents thought that there should be a fee for building a dock.

- Nine out of ten of those who thought there should be a fee thought that it should be a one-time fee.

- Eight out of ten respondents did not think that docks are harmful to the aquatic environment.
- Six out of ten respondents did not think that boating uses associated with docks are harmful to the aquatic environment.
- Less than one in five dock owners thought that docks take away from enjoyment of views.
- Only one in four dock owners thought that there are too many docks.
- More than three out of five respondents said that there are places where docks should not be allowed.
    - A very small percentage (3.3 percent) reported keeping a jet ski on their dock.
- Nearly half (46.8 percent) reported that they kept a powerboat on their dock.
    - Among those who did have a powerboat, the average length was 19.5 feet and median horsepower was 115.
    - Just under half (45.4 percent) of those who kept powerboats reported that they used them daily or at least three or four times a week.
    - Those who used their powerboats more frequently were far less likely to say property owners should be free to build a dock.
- In both the cool and warm months, the docks owners reported that the activity that they engaged in the most (not counting boating) was nature watching.

Introduction

In late 2001, the Joseph P. Riley, Jr. Institute for Urban Affairs and Policy Studies was contracted by the South Carolina Department of Health and Environmental Control (SCDHEC) Office of Ocean and Coastal Resource Management (OCRM) to conduct a telephone survey of listed dock owners in the following coastal counties:

Beaufort

Berkeley

Charleston

Colleton

Dorchester

Georgetown

Horry

Jasper

The survey would accomplish two purposes. First, it would serve as a follow-up to a general household survey done in the late summer and fall of 2001 that examined how residents in the eight counties felt about docks—regardless of whether they owned one or not. More importantly, the intention of the study was to gain some insight into how existing dock owners used their docks. In that light, the study may be read as an effort by OCRM to understand better the environmental effects of permitted docks by linking them with general usage patterns.

Survey Methodological Note

This survey posed a couple logistical problems that should be kept in mind in interpreting the results. Before going over these, it is important to note that the issue is predicated on the hypothesis that in certain cases the county of residence makes a difference in how a dock owner answers a question. That is, dock owners in Horry County might respond to a

question differently from dock owners in Charleston County. We speculate this based on the previous study of coastal residents' opinions about docks that the Riley Institute conducted. That study showed some inter-county variations in responses. For example, Charleston County residents were more likely to think that docks needed regulating than were the residents of other counties. This is undoubtedly because Charleston is the most urbanized and suburbanized county in the study.

It is normal in surveys to compare survey results to US Census data as a means of validation. For example, US Census data for the year 2000 indicates 378,460 households in the eight counties in this study. Of those, 123,326 or 32.6 percent are in Charleston County. In a random survey of the eight counties, we would then expect this percentage. The table below shows the percentages of households in the survey by county in comparison with the US Census data.

	SURVEY PERCENTAGES	US CENSUS PERCENTAGES
BEAUFORT	23.6	12.0
BERKELEY	.5	13.2
CHARLESTON	52.7	32.6
COLLETON	.9	3.8
DORCHESTER	.2	9.2
GEORGETOWN	19.6	5.7
HORRY	1.9	21.6
JASPER	.5	1.9
TOTAL	99.9	100.0

As can be easily seen, the survey over-represents Beaufort, Charleston and Georgetown Counties at the expense of the others. In particular, Horry County's total percentage of households is far more than that reflected in the survey data.

Does this invalidate the data? The short answer is that it probably does not, but a more elaborated one would conclude that we cannot be sure. Consider the data in the table at the top of the next page that shows the survey percentages from each county with the percentage of dock permits issued by county for the period 1991-1998.

	SURVEY PERCENTAGE	PERCENTAGE OF DOCK PERMITS 1991-1998
BEAUFORT	23.6	28.0
BERKELEY	.5	1.3
CHARLESTON	52.7	54.1
COLLETON	.9	3.0
DORCHESTER	.2	.4
GEORGETOWN	19.6	6.7
HORRY	1.9	5.3
JASPER	.5	1.2
TOTAL	99.9	100.0

The closer correspondence between Beaufort and Charleston Counties is evident. But this table over-represents Georgetown County at the expense of Horry County.

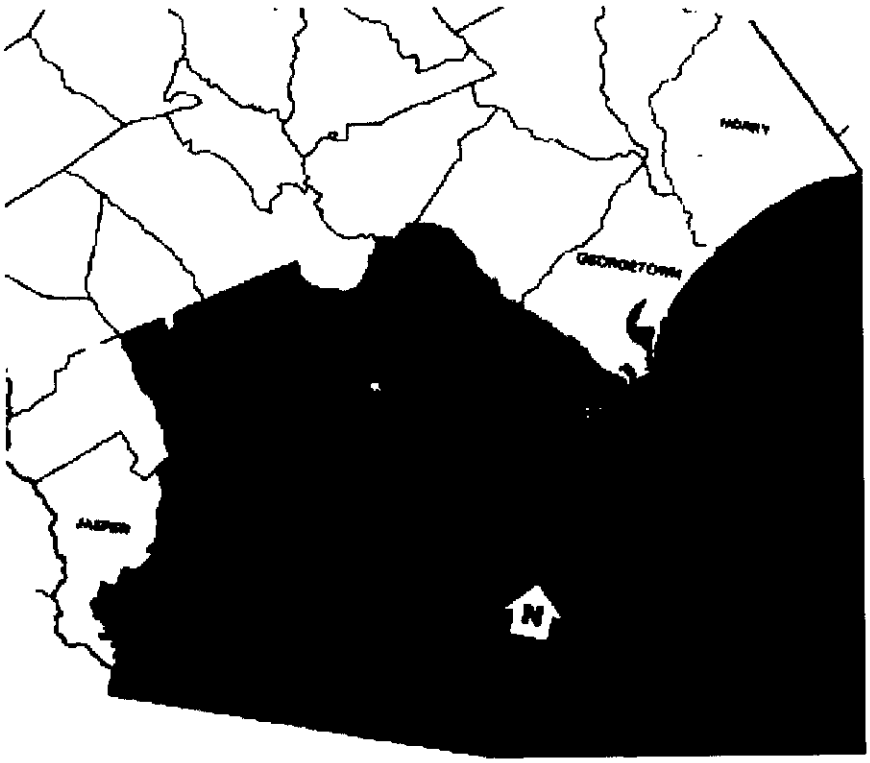
The difference between survey percentages and comparative data reflects the difficulty in identifying dock owners on a county-by-county basis. The source of dock owners' names were county tax records, which reflects the fact that docks are considered to represent significant increased valuations. However, the extent of records varied by county. Charleston and Georgetown County records included a name and a mailing address (including zip code), and, in some cases, alternate address. This meant that it was relatively easy to obtain a telephone number for those who had listed numbers. Records from Horry County had only a first and last name. Since we searched for individuals with that name in the state of South Carolina, in many cases we found several individuals with the same name. Not having a street address or zip code made it extremely difficult to identify which was the listed dock owner.

We were thus left with the difficulty of identifying dock owners to call in some of the counties targeted for the survey. In addition, while we do know the number of dock permits issued in the last ten or so years, we do not know with certainty the actual distribution of docks in the target area, which would include docks built prior to that time.

We should note that geography factors in as well. The area included in the boundaries of Beaufort and Charleston Counties, running up to the southern portion of Georgetown County, is commonly referred to as the "Lowcountry." This area is characterized by large expanses of marsh and low-lying land dotted with estuarine creeks and marshes. It is an area where large numbers of docks could be built. Comparatively, the area in northern Georgetown and Horry counties is markedly different, lacking these estuarine features and thus not providing as many opportunities for building docks. In fact, the last major estuarine feature running from south to north is the Winyah Bay at the very southern end of Georgetown County. This leaves a large expanse of both Georgetown and Horry County without significant marshlands and other features conducive to building docks.

In addition to estuarine features, we should note the size of the coastal area as the proportion of the size of the counties as well. The map below, while crude, shows the size of each county and some of the major waterways and estuaries.

Graphic 1: Eight surveyed counties



As the map shows well, Jasper, Colleton, and Dorchester Counties have relatively small areas of coastline; Charleston County clearly has the largest expanse of coastline and it, along with Beaufort County, shows significant estuarine features.

The above observations all suggest that there are different ways of considering whether or not the data reported here may be generalized to the larger population.

Methodology

The initial challenge in this survey was to identify dock owners. Data maintained by OCRM was limited to those dock owners who had requested permits for docks since that had became a state requirement. OCRM data thus omitted dock owners who built or acquired their docks prior to the institution of the requirement.

Since docks are considered major property improvements, county tax assessors keep records of homes that have docks. While assessor records are not without drawbacks—there may be some dock owners who do not report their docks or request building permits—the highly visible nature of docks makes them susceptible to recording. Ms. Denise Sanger of the South Carolina Marine Resources and Research Institute was able to obtain property tax records of dock owners for each of the eight counties. Individual dock owners in each of the eight counties were assigned sequential numbers as they appeared in the tax assessor records. Then, using random numbers obtained from www.random.org, proportional samples were drawn from each of the counties.

Initially, we requested 1,500 numbers, with a goal of making 400 dock owner household contacts. However, as noted above, some of the county tax assessor records were so limited—there was a name but no address, town, or zip code—that we were unable to definitively ascertain a telephone number as described below. This is discussed above in the Survey Methodological Note.

There were no telephone numbers supplied on the county tax rolls. So, the next methodological step was to obtain a telephone number for individual, randomly selected, dock

owning households. The Institute Graduate Assistants used a variety of Internet white page listings, such as www.anywho.com and www.yahoo.com, to do this. Once telephone numbers were obtained, they were entered into a database along with the dock owner's name so we could validate when we called. As the response data were recorded, the individual dock owner's names were deleted to maintain confidentiality of responses.

The surveyors in this study were College of Charleston undergraduate students who called the households in the eight counties during the months of November and December. Most of the calls took place during the evening hours, Monday through Thursday, between the hours of 5.30 PM and 8.30 PM. Calls were made on Saturday mornings between the hours of 9 AM and 12 PM to residences that we were unable to reach Monday through Thursday evenings. Additionally, some calling took place on weekdays between 11 AM and 4 PM.

We attempted to contact each number at least three times before we took it off the list using the following procedure. When the surveyors encountered an answering machine or failed to get an answer from a number on the list, they recorded the date and time of the attempt. The surveyors then followed up with another attempt two days later, at an earlier or a later time than that of the first attempt. For example, if they failed to get an answer the first time at 6.30 PM, they attempted the call either at 5.30 PM or at 8 PM the following time. If that attempt produced no result, they attempted another contact on Saturday morning or during the daytime. After the surveyors recorded three unsuccessful attempts for the same number, the Institute staff crossed the number off the list.

In some instances, the contacted person requested of the surveyor to call back again. In cases when the contacted person asked the surveyor to call back at another time, the surveyor recorded the desired callback time and attempted the contact again at the recorded time. After three unsuccessful attempts, the surveyor discontinued the calling, and the Institute staff took the number off the list.

Experience with surveys of this type has indicated a higher rate of success in contacting certain households during the daytime. Thus, one surveyor made calls during the daytime

between 11 AM and 4 PM. The surveyor usually attempted to contact numbers that had no answer or reached an answering machine during the evening attempts. The yield rate of daytime calling made it cost-prohibitive to use more than one surveyor during these hours. On average, the daytime surveyor completed one to two surveys per hour, compared with the average yield rate of four to five surveys per hour for the evening calls.

Survey data includes 423 successfully contacted households. Assuming that those households represent a random sample, the margin of error is ± 5 percent at the .05 confidence level. This margin of error allows us to generalize the findings of this study to be representative of the entire population of dock owners in the coastal counties of South Carolina. To understand this error margin, assume that 50 percent of the households surveyed responded "yes" to a question and the other 50 percent responded "no" to the same question. The error margin indicates that had we asked all the dock owners' households in the eight counties that question, the percentage of those responding "yes" would be between 45 and 55 percent (± 5 percent of 50 percent), 95 times out of 100 (as .05 level of confidence indicates). The use of .05 level of confidence is standard in social science research. It is important to note that the least confidence exists in those responses with an even dispersion, such as a 50-50 split. As responses diverge in either direction, the margin of error shrinks. Thus, an error margin of 5 percent is the largest one for this data set.

In survey research, telephone surveys are vastly preferred to the mail surveys alternative. The reason for this preference is the low response rate that the mail surveys yield (20 percent or less), which typically produces biased results, since the respondents to mail surveys do not represent a random sample (they are generally more conservative in their political views, for example). It is thus difficult to generalize the findings of mail surveys to a larger population.

Survey design

Because the major goal of this survey was to identify attributes of docks and how they were used, it does not closely follow the previous survey conducted by the Institute for all

coastal residents. Thus, only limited comparisons can be drawn between the two data sets. This survey asked a few attribute questions such as the estimated value of their home, the age of the dock owner's dock, size and attributes of the dock (boat lift, roof, etc.) and usage patterns of the dock in warmer and colder months. Some questions duplicated the previous survey such as questions about regulating docks as well as questions about the impact docks have on the environment.

After construction of the survey instrument and approval of OCRM staff, the Institute staff conducted a beta test of the survey. This beta test consisted of calling a limited number of dock owners and administering the survey and then asking them if the survey questions were clear, if they could think of ways to improve it, and so on.

The survey instrument is attached in Appendix 1 to this report.

Survey Findings

The following report presents the findings of the survey in the following general categories:

a) general profile of the respondents

b) characteristics and use of the respondents' docks

c) dock owners' opinions regarding docks and their regulation

d) analysis and conclusions.

General profile of the respondents

We asked the dock owners to report how many years they have lived in their present home. We did not anticipate that many would tell us they owned more than one home—but that in fact was the case. Undoubtedly this reflects a certain percentage of dock owners who use the home with the dock as a vacation residence. In cases when the respondents indicated they had more than one home, we specifically asked the number of years they have lived in or owned the home with the dock. The mean value reported was 13.7 years.

As we expected, there was a statistically significant relationship with the answer to this question and one that asked whether the respondent bought their home with a dock or built it. Those who built the docks for their home reported a mean of 16 years owning their home while those who bought a house with an existing dock reported owning their homes 10.5 years (p value = <.0001).

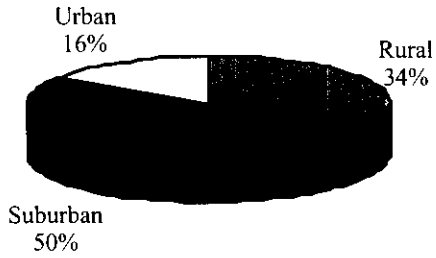
There was no statistically significant relationship between the length and/or size of the dock and how long the respondents reported living in their homes. This lends credence to a hypothesis that newer docks are no longer than older ones.

When we asked the respondents whether they bought their home with a dock or built the dock since they moved in, fifty-eight percent reported that they have built the dock since they moved into their home. Forty-two percent responded that their home already had a dock when they bought it. Several respondents indicated that they rebuilt their dock after Hurricane Hugo. We elected to keep these in the response group who indicated they built their own dock since it is clear they valued the dock enough to rebuild it after it was destroyed.

The same observation holds in the next question. We asked the respondents to report the approximate age of their dock. For the respondents who have rebuilt their dock after Hugo, we recorded the age of the "new," that is, reconstructed dock. The mean answer to the question was 13.3 years.

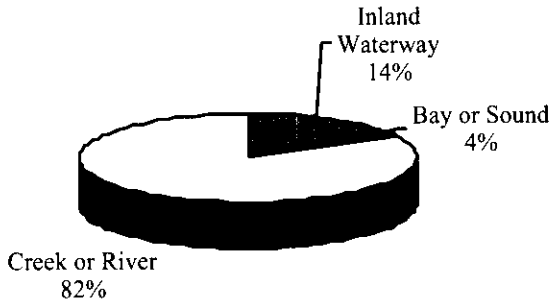
Questions dealing with county of residence are discussed in the methodological note of this report.

Area Respondent Lives In



Since we found some significant differences between those who reported that they lived in a rural, suburban and urban environment in the first survey, we kept those questions in this survey. The operant hypothesis was that urban dock owners would think differently about docks in certain ways. For example, we would speculate that they would be more tolerant of government regulation of docks and perhaps be more inclined to think there are "too many" docks. The pie chart presents the answers to the question. Precisely one-half of the respondents reported that they live in a suburban area.

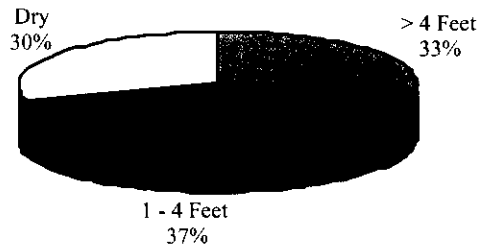
Location of Dock



The next question asked the respondent whether their dock was located on an inland waterway, bay or sound, or a creek or river. We did not attempt to define the categories, and we did not experience anyone indicating that they were not clear with respect to these alternatives. The pie chart indicates the frequency of responses to this question. A vast majority, 82 percent of the respondents reported that their docks are located on a creek or river.

When asked to report on the depth of water at their dock at the time of low tide, 37 percent of respondents reported that their dock was 1 to 4 feet high at low tide. Thirty-three percent answered that their dock was less than four feet high at low tide, while 30 percent of the respondents said that their dock was dry at low tide. The chart shows this graphically.

Water at Low Tide



As we expected, we found a statistically significant and consistent relationship between responses to this question and whether or not the respondent reported owning a powerboat that they kept on their dock. Almost sixty percent of those who reported in excess of four

feet of water at low tide indicated that they had a powerboat. This figure dropped to forty-three percent for those with 1 – 4 feet of water, and fell to twenty-two percent for those who said their dock was dry at low tide (Chi-square = 13.92, p = .0003). Interestingly, because only a small percentage of dock owners reported keeping sailboats on their docks, there was no similar statistically significant correlation with responses to that question.

We also found a statistically significant relationship between frequency of use of the dock in warm months and depth of water reported at low tide. While 24 percent of those whose dock was dry at low tide reported using their dock daily, the comparable figures for those with 1 – 4 feet of water and more than four feet of water were 41 and 42 percent respectively. The contingency table shows the complete pattern of frequency of use.

FREQUENCY OF USE IN WARM MONTHS (PERCENT)						
LOW TIDE	DAILY	3-4 TIMES WEEK	ONCE A WEEK	1 – 2 TIME MONT	LESS THAN ONCE A MONTH	TOTAL
> 4 FT	42.3	33.6	14.6	5.8	3.7	100.0
1 – 4 FT	41.4	34.7	11.8	6.6	5.3	99.8
DRY	24.0	29.8	17.4	19.8	9.1	100.1

(Chi Square = 36.259, p = .003)

Those who reported their dock was dry at low tide have a distinct tendency to use them less. In fact, nearly one in ten reports using it less than once a month during the warm months.

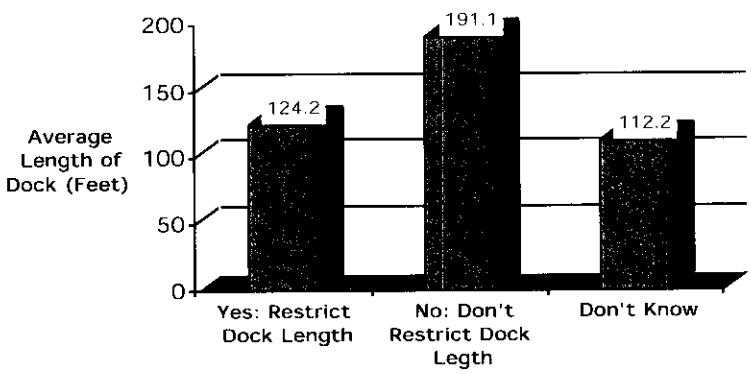
We did not find a similar statistically significant relationship with the frequency of use reported during the cold months. In fact, all dock owners reported a drastically lowered rate of usage during these months with nearly half saying they used their docks 1 – 2 times a month or less.

We asked respondents to tell us whether the width of the water where their dock was located was greater than 50 feet. Almost two-thirds—64.7 percent—indicated that it was, with 32.9 percent indicating it was not. A total of 10 respondents, or 2.4 percent was un-

sure. The answers to this question correlated significantly with whether the dock was reported in a rural, suburban or urban area. Those living in rural areas were more likely to say the water width was greater than 50 feet, but there was no difference between those living in suburban and urban areas. Almost 72 percent of those in rural areas reported water width greater than 50 feet, while the figure was 61 percent for those living in urban and suburban areas (Chi Square = 10.8, p = .0289).

Comparisons between county of residence and answers to this question are also interesting for the three counties substantially represented in this study. Those living in Beaufort County were far more likely to say their dock was located on a waterway 50 feet or wider than those in Georgetown or Charleston County. Exactly 83 percent of those in Beaufort County said the waterway was greater than 50 feet compared to 60 percent in Charleston and Georgetown Counties (Chi Square = 25.9, p = .0266).

We asked respondents to tell us if they knew how long their dock was. A total of 387 answered the question. They reported a mean length of 138 feet, with a median of 75 feet and a mode of 100 feet. Answers to this question correlated significantly with the county of the respondent. The mean length for Georgetown County dock owners was 61 feet, with the mean for Beaufort County homes at 131 feet. Charleston County residents reported a mean dock length of 169 feet (p = .0008). The other counties have such low response rates that we cannot have complete confidence in the numbers.



Further analysis of responses to this question revealed that it had a significant correlation with responses to a question later in the survey that asked respondents if they thought the length of docks should

be restricted. The chart shows very clearly that responses to this question may be self-serving.

The analysis of variance (ANOVA) for this relationship has an F-value of 3.544, with a P-value of .0148. This allows us to suggest with a good deal of confidence that dock owners with longer docks are much more likely to say that the length of docks should not be restricted than are those with shorter docks. Clearly, there seems to be a self-serving dimension of the responses to the question on restricting the length of docks. We can guess that many dock owners may say the length of their dock should not be restricted, but longer ones should be.

Dock Characteristics

We asked respondents questions designed to ascertain the characteristics of their docks. The responses to the questions are in the table.

DOCK CHARACTERISTICS	YES (PERCENT)	NO (PERCENT)
Fixed (non-floating) deck	60.3	39.7
Floating Deck	71.9	28.1
Boat Lift	25.3	74.7
Cover (Roof)	22.2	77.8
Railing	52.2	47.8

In some cases, dock characteristics correlated significantly with county of residence. Almost nine of ten Beaufort County residents reported a floating dock, while 64 percent of those in Charleston County and 71 percent of those in Georgetown County said they had one (Chi Square – 20.471, P-value = .0046). Beaufort County dock owners were also more likely to have a boatlift and railing than the other two large counties in the survey.

Interestingly, those who reported a dock with a cover were no more likely to say they thought covers should be restricted than those whose dock did not have a cover.

Use of docks

The next group of questions dealt with the general use of docks. The questions started by asking respondents if they kept a powerboat on their dock. The chart shows the responses.

Powerboat on Dock

As the chart shows, slightly less than half of the respondents indicated they kept a powerboat on their dock.

As we would expect, those who had docks on deep water were considerably more likely to have a powerboat. Almost 60 percent of those whose docks had four or more feet of water at low tide reported a powerboat, whereas 43 percent of those with 1- 4 feet of water and 37 percent of those whose dock was dry at low tide reported having one.

There was also a significant association between those who had a powerboat and the width of the body of water on which their dock was located. Just over 54 percent of those whose dock was located on water 50 or more feet wide had a powerboat, while only 34 percent of those on narrower bodies of water reported one (Chi Square = 16.567, P – value = .0003).

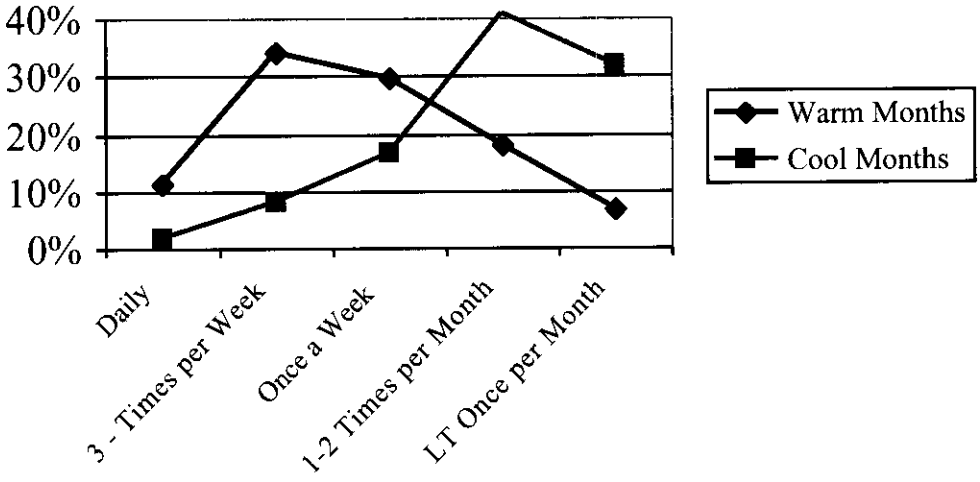
We asked respondents the length of the powerboat on their dock. The average length reported was 19.5 feet, with a median of 18 and a mode of 17, indicating a slight skew from a few extraordinarily long boats. Georgetown County dock owners reported the smallest average length with 18.1 feet, while Charleston County residents had the longest boats with an average of 20 feet. Beaufort County residents averaged 19.4 feet (p-value = .0418). As we would expect, those with four or more feet of water at low tide had the longest boats, averaging 21.3 feet. Counterintuitively, however, those whose dock was dry at low tide had longer boats than those with 1 – 4 feet of water, with an average length of 18.2 for

the former and 17.7 for the latter (p – value = .0086). Those on wider bodies of water had longer boats, on average, than did those whose dock was on a body of water less than 50 feet wide. However, the differences were not large enough to be statistically significant.

Responding dock owners were asked the horsepower of their powerboats. They reported an average of 139.6 HP, with a median of 115. The high figure quoted was 880 HP and the low was 4 HP.

Without defining the months, we asked respondents to tell us how frequently they used their powerboat during the warm and cool months. Generally speaking, we would assume that the warm months are from May through September. The graph shows their responses.

Frequency of Powerboat Use



As we expected, the two lines nearly mirror each other, with over 45 percent reporting they use their boats 3-4 times a week or more during the warm months and nearly 74 percent reporting 1-2 times per month or less during the cool months.

There was a significant, but not consistent correlation of responses to this question and the length of the powerboat. Those who use their powerboat daily in the warm months averaged 24.3 feet in length, and those who used it less than once a month averaged 17.1 feet.

However, those who used their boat once a week averaged 20.3 feet while those who used it 3-4 times per week averaged 18.5 feet (ANOVA P-value = .0224).

We asked respondents if they kept a sailboat on their dock. Only 28 households, or 7 percent of the sample, responded affirmatively. They reported the mean length of their sailboat at 26 feet and the mean horsepower at 25.

Within this small group of sailboat owners, 57 percent (16 respondents) reported using their boats once or more a week during warm weather. With 81.5 percent reporting that they used it once or twice a month or less during the cool months, we can conclude that sailing is decidedly a warm weather activity. Interestingly, there was no correlation between the size of the body of water and whether or not the household had a sailboat. Those living on wider bodies of water were no more likely to have a sailboat than those living on narrow ones.

When asked if they keep a jet ski at their dock, three percent of the respondents reported that they own one. Again, the usage frequencies were evenly distributed for the warm months, while 12 of the 14 respondents who reported that they have a jet ski said that they use it less than once a month during the cool months.

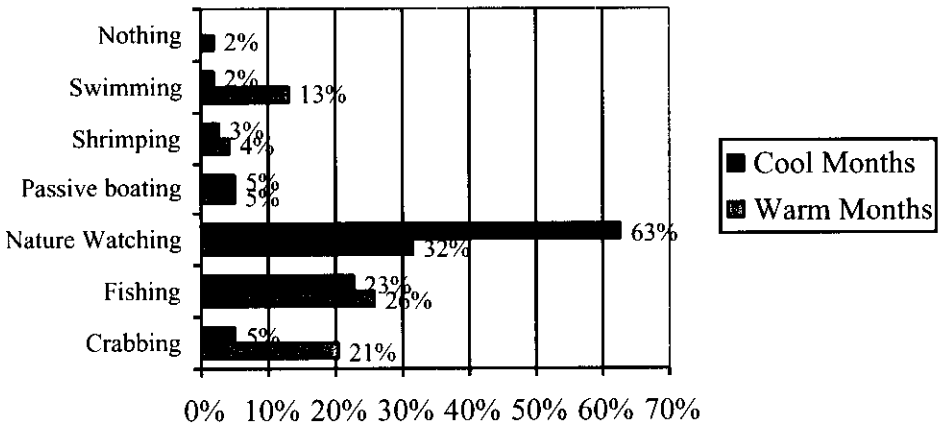
We also asked the respondents if they keep a rowboat, canoe, or a kayak at their dock. The responses to these questions are in the table:

TYPE OF CRAFT	YES (PERCENT)	NO (PERCENT)
Rowboat	9.7	90.3
Canoe	7.8	92.2
Kayak	15.4	84.6

Clearly, more passive types of boating are not nearly as popular as powerboating. And, as we might expect, kayaking is more popular in a tidal coastal environment than rowing or canoeing.

We asked respondents how they used their dock during the warm months and the cool months, aside from recreational power boating, sailing, or jet skiing. Their responses are in the graph.

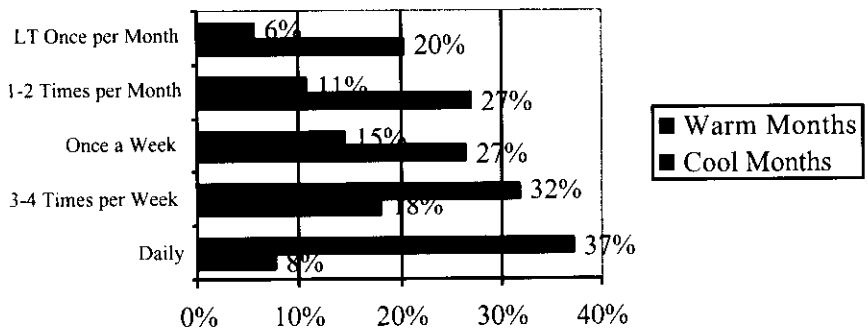
Non-powerboat use of docks



The graph clearly shows that both in the cool and the warm months, a plurality of dock owners use their docks for nature watching, with the next most predominant activity being fishing.

We asked respondents how often they used their docks during the warm and cool months. Their responses are in the graph:

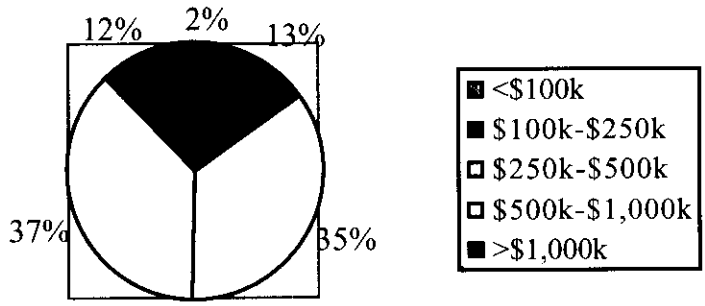
Frequency of Use of Dock



Finally, we asked the respondents if they share their dock with another home. A total of 37, or 8.7 percent reported sharing their dock with another homeowner. We were unable to correlate responses to this question with any patterns of usage.

Respondents were asked to estimate the value of their homes. Their responses are in the chart.

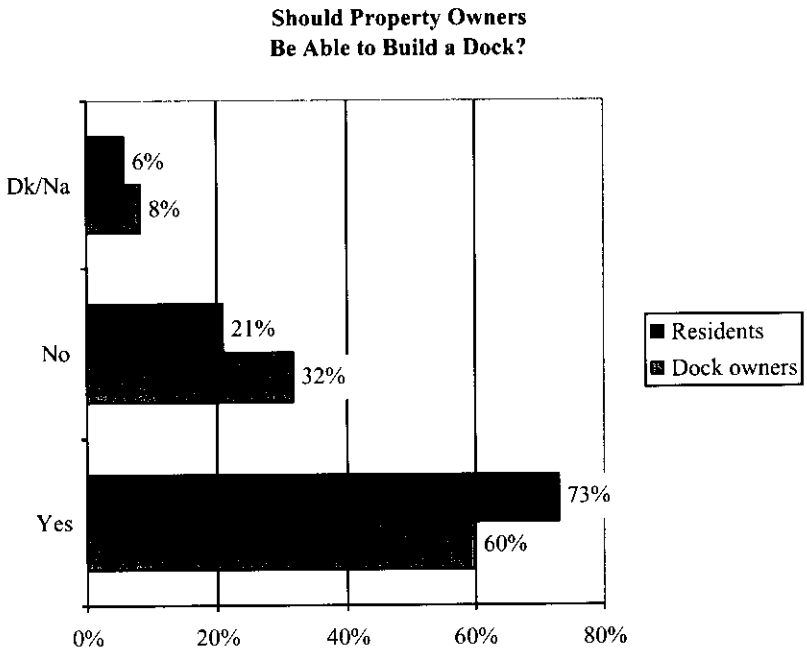
Value of Dock Owner's Home



With 85 percent of the dock owners reporting the value of their homes in excess of $250,000, this is clearly a wealthier group than the general coastal population. As we would expect, there is a correlation between home value and size of the body of water the dock is on, with more expensive homes located on larger expanses of water. As the value of the home increased, the likelihood of owning a powerboat increased as well, undoubtedly reflecting the respondent's greater wealth (Chi Square = 28.162, P-value = <.0001). Perhaps reflecting wealth and more leisure time, we found that those who had more valuable homes were also likely to use their docks more frequently (Chi Square 38.854, P-value = .0011).

Opinions about docks and dock regulations

The next section of the survey deals with dock regulation. We began this section by asking the respondents if they think that anyone who owns property on the water should be able to build a dock. The graph shows the responses and contrasts them to the previous study of coastal residents.



The difference in opinion is noticeable and deserves some speculation. While a large percentage of both groups believe that property owners should be able to build docks, a smaller percentage of those who have docks believe it should be an automatic privilege.

This difference may be interpreted as self-serving, since we did not interview prospective dock owners, but rather only those who already had a dock in place, and who were already assured of having a dock. Thus, for them the question is really asking whether or not their neighbors or others who live on the water should be able to build a dock. Since we know that respondents in this group are frequent boaters, they may see additional docks as visually detracting from water and marsh vistas or even as dangerous.

There is some additional support for this in the data. When we control for how frequently the dock owner reported using their powerboat during the warm months, we find that the more often they reported using their boat, the more likely they were to say that individuals should not be able to build a dock. The table on the next page shows this.

SHOULD OWNERS BE ABLE TO BUILD A DOCK? (PERCENTS)			
Frequency of powerboat use in warm months	Yes	No	Dk/Na
Daily	45.5%	45.5%	9.1%
3-4 Times a week	57.4%	36.8%	5.8%
Once a week	62.7%	32.2%	5.1%
1-2 Times a month	61.1%	19.4%	19.3%
Once a month	76.9%	7.7%	15.4%

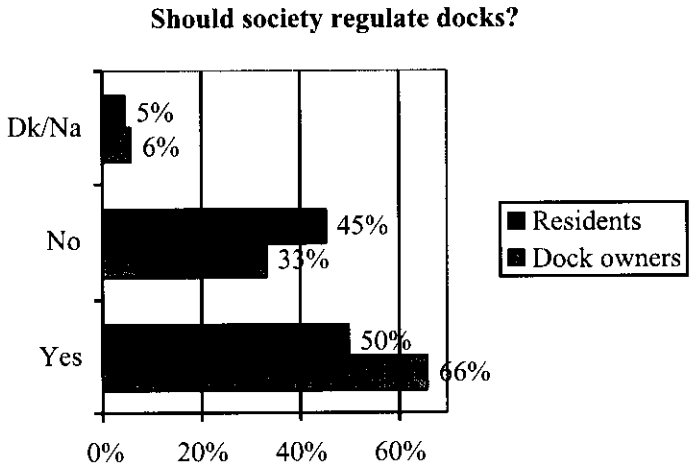
(Chi – Square =- 18.612, P-value = .0983)

Note carefully that the P-value for this cross-tabulation is above the .05 level standard accepted for social science research. Still, it falls below the .1 level that many think is acceptable. If the table is given statistical credibility, it directly suggests that the less frequently a dock owner uses their powerboat, the more likely they are to say anyone should be able to build a dock or answer "don't know" to the question. Clearly, there is an issue here that stems from the experience of existing dock owners.

If we compare the three counties with the largest number of respondents, we see that dock owners in Georgetown County are most likely to allow anyone who owns property on the water to build a dock, with 77 percent responding affirmatively to the question. Charleston County dock owners follow, with six out of 10 saying that they think anyone with water property should be able to build a dock. Beaufort County respondents were the least likely to allow anyone who owns property on the water to build a dock, with only 43 percent responding affirmatively.

As we anticipated, following the findings of the first survey, we found a statistically significant relationship between the respondents' answer to this question and whether they thought docks were harmful to the aquatic environment. Among those who thought that docks were harmful, only 34 percent thought that individuals should be able to build docks. Among those who thought that docks did not harm the aquatic environment, 66 percent thought that property owners should be able to build docks (Chi Square = 63.134, P-value = <.0001).

After asking this question, we asked the respondents if they think that society should regulate when and where private docks can be built. We used the term "society" instead of "government" to avoid biasing those who have a negative attitude toward government regulation, though this is likely impossible. The responses are recorded in the chart, which includes the responses from the coastal residents' survey.

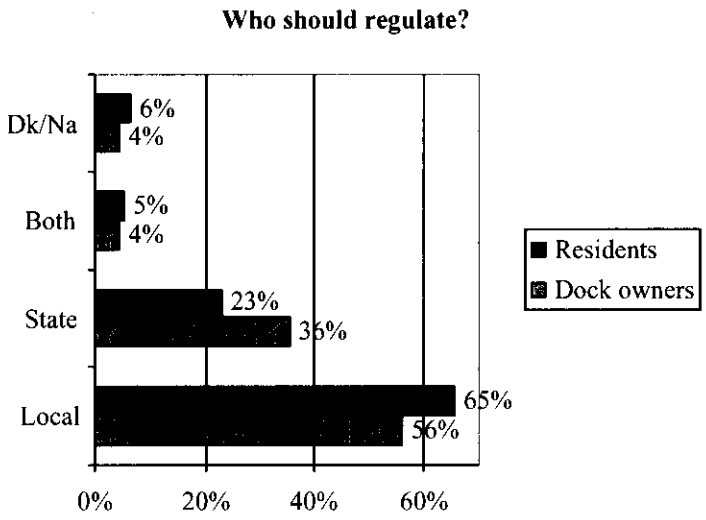


As the chart shows, a significant majority of the dock owners thought that society should regulate docks. This contrasts fairly sharply with the bare majority of residents who felt the same way in the previous study.

Unlike the previous study, we found no intra-county variation in responses to this question. Specifically, dock owners living in Charleston County were no more likely to say society should regulate docks than residents of the other counties. The results are also consistent for those with different property values as well as location of the dock (urban, suburban, or rural).

As we expected, we found a significant correlation on answers to this question and responses to whether or not the respondents thought that docks were harmful to the aquatic environment. Among those who thought that docks were harmful, 83 percent said that they thought docks should be regulated. However, even among those who did not think that docks are harmful, 57 percent thought that they should be regulated (Chi – square = 37.513, P-value = <.0001).

As in the previous survey, we asked which level of government should regulate docks. The responses are in the chart and compare favorably with the responses from the general survey.



This question was only asked of those who thought society should regulate. As the chart shows, 56 percent of those who said that society should regulate thought that local government should regulate docks, while 35 percent thought that dock regulation should be in the hands of the state government. Four percent of the respondents thought that it should be a joint effort from both state and local levels of government. The comparisons with responses from the general populace are notable—specifically in the level of confidence placed in county, as opposed to state, government.

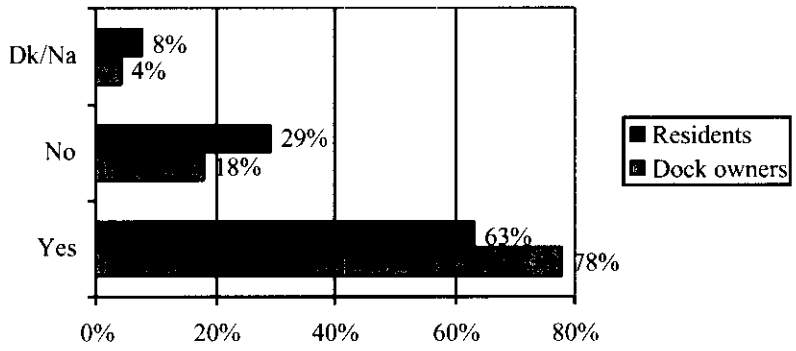
We asked respondents whether or not there should be restrictions placed on the length of docks. This question differed from the one we previously asked the general coastal population, which asked if docks should be restricted to 1000 feet or less. Three out of four (75.4 percent) of the dock owners thought that there should be restrictions on the length of docks. One in five respondents (21.1 percent) thought there should be no restrictions. When asked to specify what they think should be the maximum permitted length of a dock, the respondents reported a mean length of 357 feet.

Many respondents responded to this question in ambiguous ways—not saying "yes" or "no" but rather saying they thought that it "depends" what the restricted length of dock should be. In this context, they mentioned such things as the "location" of the dock. This

could mean a number of things, ranging from concern about boating safety or density of docks to preservation of some vistas. A few suggested the size of the property mattered, obviously suggesting that longer docks may be permitted on larger pieces of property.

Again, we found a strong correlation between responses to this question and whether or not the respondents thought docks were harmful to the aquatic environment.

Restrict size of docks?

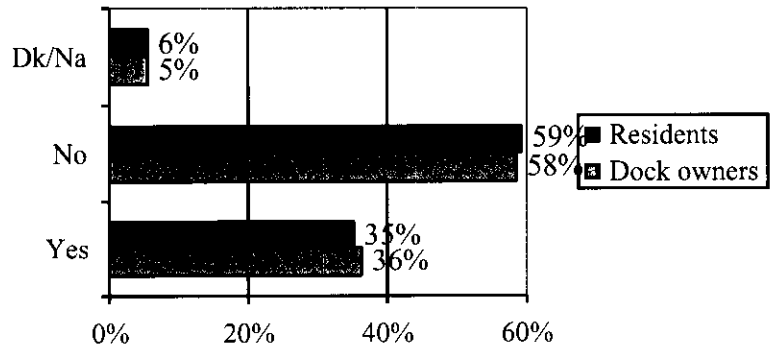


We asked if there should be restrictions on the size of docks. The responses in the chart are compared to those of the general population.

As the chart shows, dock owners are broadly more tolerant of the idea that there should be restrictions on the size of docks as opposed to the general population.

Although 75 percent of the respondents supported the idea of restricting dock length, and, subsequently, 78 percent of them agreed that dock size should be restricted, only 36 percent of the respondents thought that restrictions should be placed on whether or not docks can be

Regulate roofs and covering?

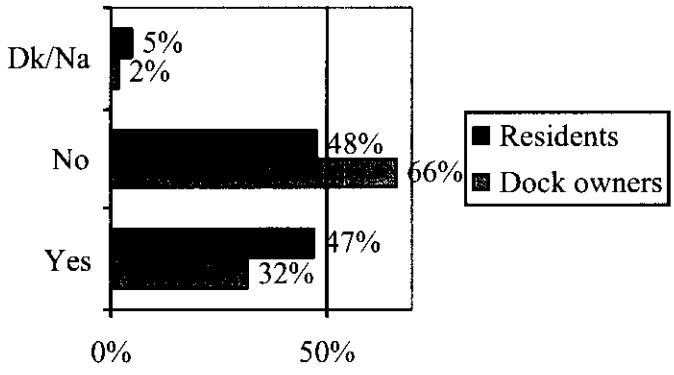


built with roofs or coverings. The chart shows this in comparison to the general survey.

There appears to be remarkable consistency in responses to this question, regardless of whether the respondent was a dock owner or not.

Additional analyses of responses to this question were interesting. Dock owners in Beaufort County were more inclined to say that restrictions should be put on covering for docks, as opposed to dock owners in Charleston or Georgetown Counties. Whereas 44 percent of those from Beaufort County thought covering should be restricted, only 35 percent of Charleston County dock owners and 31 percent of Georgetown County dock owners thought so (Chi-square = 16.215, P-value = .0625).

Pay fee to build dock?



We next wanted to know if dock owners think a fee should be paid to build a dock. Their responses to this question are in the bar chart.

Two out of three dock owning households did not think that dock owners should pay a fee to build a dock. This contrasts sharply with less than half of the coastal residents responding affirmatively to the same question.

The follow-up question for the respondents who said that dock owners should pay a fee to build a dock was—"Do you think the fee should be a one-time permit fee or dock owners would be required to pay an annual fee?" An overwhelming majority thought that it should be a one-time fee. Only 9 percent of the respondents thought that dock owners should pay an annual fee for building a dock. When asked how much the fee should be, three of the 12 respondents who thought the fee should be annual specified the amount—two said it should be $200, and one person said it should be $50. The mean answer overall was $161.

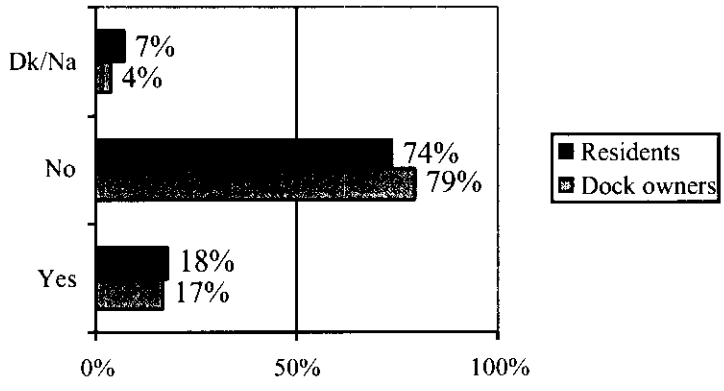
However, not everyone had a specific sum in mind. Some respondents, 28 of them, said that the fee should depend on things like the cost of construction, property value, length and size of dock, or type of dock.

A follow-up to this question asked respondents who thought a fee should be charged whether they thought it should be a one-time or an annual fee. An overwhelming percentage—88.6—thought it should be a one-time fee. This contrasts with the previous study where 71 percent of the coastal residents said they thought it should be a one-time fee. In both cases, however, there is strong sentiment to only charge a one-time fee.

We next asked the dock owners whether or not they thought that docks have negative environmental impacts. These questions were also asked in the previous survey where we were surprised to find that three-quarters of the coastal population did not think that docks were inherently harmful to the aquatic environment.

We were careful in the wording of the first question since OCRM staff wanted to distinguish between the environmental impacts of docks versus the environmental impacts of how docks are used—specifically powerboat-related uses. The following chart presents the responses to the question, thinking just about docks and not how they are used, they thought docks are harmful to the aquatic environment.

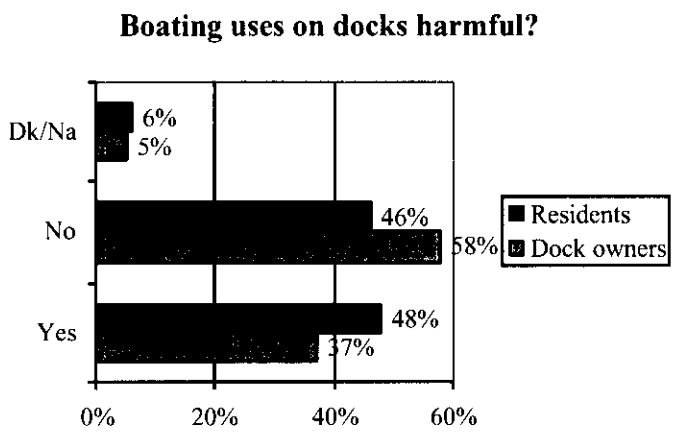
Are docks harmful to aquatic environment?



Less than one in five respondent answered affirmatively. A vast majority of the respondents, 79 percent, did not think that docks are harmful to the aquatic environment—a

figure that compares positively to the 74 percent of the general population that answered the same question affirmatively.

At a near significant level (Chi-square = 15.395, P-value = .0806), residents of Georgetown County were less likely to find docks harmful to aquatic environment than residents of either Charleston or Beaufort County. Less than 10 percent of those living in Georgetown County thought docks were harmful, while the comparable figures for Charleston and Beaufort Counties were 19 percent.



As in the previous survey, we followed this question by asking respondents if they thought the boating uses generally associated with docks are harmful. The responses to this question, along with data from the previous survey are in the chart here.

The perspective of dock owners is in some contrast to that of the general population. Nearly forty percent of the dock owners said that boating uses are harmful to the aquatic environment, while 58 percent thought that they are not harmful. This deviates from the opinions of the general population, 48 percent of which thought that boating uses are harmful, while 46 percent did not think so.

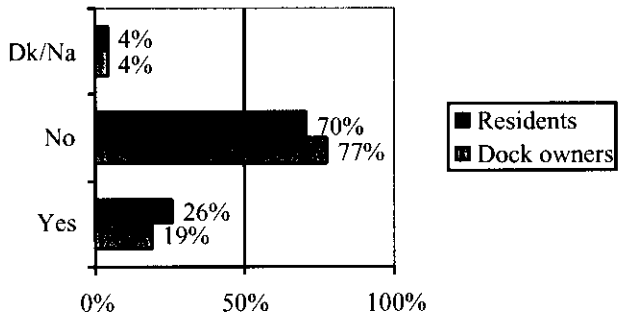
Further analysis of this question showed a near-significant correlation between the county of residence and the answers to the question (Chi-square = 15.938, P-value = .0682). Charleston County dock owners were more inclined to say that boating uses associated with docks were harmful than were residents of Beaufort or Georgetown Counties. Whereas 43 percent of Charleston County residents thought that boating uses were harm-

ful, only 34 percent of Beaufort County and 24 percent of Georgetown County dock owners thought so.

Interestingly, we did not find a correlation between this question and whether or not the dock owner actually owned a powerboat—indicating that they quite likely would use a powerboat whether they thought it harmful or not. Nor did the answer correlate with the width of the water the dock was located on.

We asked the dock owning household if they thought that docks take away from the enjoyment of views of salt marshes, creeks, and rivers. Their responses to this question, contrasted with those of the general population, are in the chart.

Do docks take away from views?

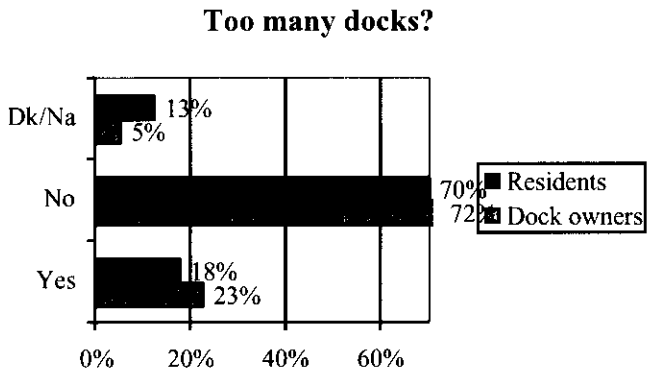


Surprisingly, dock owners were slightly less likely to think that docks detracted from views.

As expected, answers to this question correlated strongly with whether or not the respondent thought docks were harmful to the environment in and of themselves, but not with other variables such as location of the dock or width of the waterway.

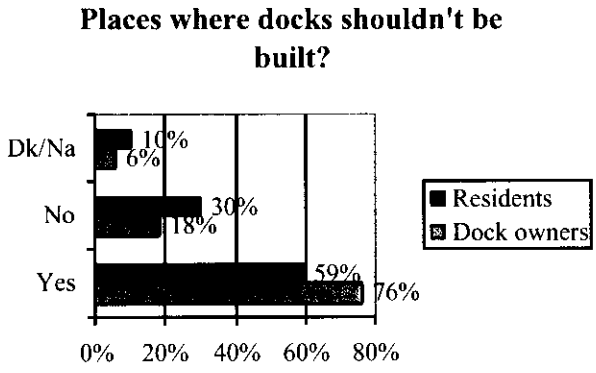
For those who thought docks did interview with water views, we followed up with two additional questions. The first asked if they thought views could be improved by limiting how close docks could be to each other. An overwhelming majority—90 percent—answered affirmatively to this question. Next, we asked if they thought views could be improved by limiting how long docks could be. Nearly 96 percent responded affirmatively to this question.

We asked the dock owners if they think that there are too many docks, and almost three out of four said "no." This practically mirrors the responses of the general coastal popula-



tion—though dock owners were more inclined to answer "yes" rather than "don't know" to this question.

Of the 23 percent who answered affirmatively, four out of five (81 percent) feel that community or common docks between several homes are an effective way to control the proliferation of docks. There was no correlation between this answer and the value of property that the respondent reported, nor any other variables.



Finally, we asked the respondents to tell us if there are kinds of places where docks should not be allowed. More than three out of four respondents said "yes", while less than one in five said "no". The chart shows this graphically, along with responses of the general population.

Of note is that the dock-owning households appear more tolerant of restricting docks than the general population. Interestingly, those who owned powerboats were more likely to answer this question affirmatively, than were those who did not own powerboats.

When consequently asked to report the specific places where docks should not be allowed, the respondents gave an array of answers. After collapsing them into logically consistent categories, we found that 27 percent of respondents mentioned narrow waterways as an area to restrict; 26 percent thought that docks should not be allowed in protected areas, including marshland; 22 percent said that docks should not be allowed in places where there

are already too many docks, or populated or congested areas; 16 percent would prohibit docks in places where they restrict navigation.

Summary and conclusion

Perhaps the most surprising part of this study is the discovery that dock owners are broadly more tolerant of government regulation of docks than the general populace. As a group, they are more inclined to say that there are places where docks should not be built. They are more inclined to say the size of docks should be restricted. They are more inclined to say that the state should regulate—as opposed to local government, which may be perceived as more responsive.

We can speculate on reasons for this—though there is not enough evidence here to suggest that one be preferred over another.

A negative, self-serving interpretation is that existing dock owners would like to see future docks regulated and even restricted. Since they already have a dock, they may see themselves with little to lose and much to gain with tighter controls. If docks are allocated, their property values would be all the more enhanced by having a dock. This interpretation gains some anecdotal support in observations about who typically opposes new dock permits; that is, in most cases it is neighbors who already have docks. It also gains some support from the data presented here showing that a smaller percentage of dock owners think fees should be charged to build docks than does the general coastal population. But we should not be surprised with such an observation—it is perfectly rational for individuals to want to maximize their economic circumstances.

A more benevolent interpretation is that dock owners have a heightened degree of awareness of docks and see the need for at least some regulation. A larger percentage of dock owners are frequent boaters—they may regularly see dozens, if not hundreds, of docks and understand their cumulative impacts on the coastal environment.

Finally, in the previous study we observed a consistent correlation between education and views on government regulation; the more educated a respondent was, the more likely they were to favor regulation. By virtue of having more expensive homes, it is certainly reasonable to assume that dock owners are wealthier than average coastal residents. Since wealth

correlates with education, the observations here may simply affirm what we observed in the previous study. In this case, there is no reason to assume self-interest or any heightened awareness in the affirmation of government regulation. We should point out that this interpretation is undermined a bit by observing that dock owners typically do not see boating uses on docks as environmentally harmful when we would speculate that a more educated population would say the opposite.

In any event, it is certainly interesting to note that fewer dock owners are inclined to see boating uses attached to docks as harmful to the environment as the general populace. This opinion is not just that of boat owners. While it is true that those who own boats were slightly more likely to say boating uses of docks were not environmentally harmful, the relationship was not statistically significant. A majority of dock owners who do not own powerboats held the same opinion.

We only speculate on the reasons for this. Perhaps it is the case that dock owners are especially careful in their use of boats—living on the water, they may take special care to preserve and care for the environment. Perhaps it is self-serving. Even those who do not have powerboats would like to think that docks cannot be harmful in any way. Perhaps it is just because, having docks, they see boating as a routine event and accept it as a matter of habit.

OCRM staff suggested a concern for how docks were used in relation to the size of the body of water they are located on. In most cases, we were unable to differentiate statistically with respect to this. While boats on docks located on narrower waterways tended to be smaller, the frequency and patterns of usage did not appear to vary much at all. There may be reasons for concern about this, since it is logically the case that smaller bodies of water cannot bear environmental burdens as well as larger ones.

Most dock owners use their docks a lot. The nearly half that keep a boat on their dock use them quite frequently. We know of no study on frequency of boating, but having a dock and a boat already in the water undoubtedly leads to more usage compared to those who

must go to a marina or trailer their boat. Within this observation, there is a bigger picture. No matter what the usage, this study shows that docks are an integral part of the daily lives of dock owners. Especially in the warmer months, a plurality reports using their dock daily. There are good reasons to observe that, beyond boating and fishing, they enjoy sitting on them, watching wildlife and tidal changes. In many respects, docks appear to be an integral part of the coastal lifestyle and culture.

Appendix 1: Survey Instrument

Surveyor: Date: _____ Time: _____ Number: _____

Hi: My name is _____ and I'm calling from the College of Charleston. Records we've obtained indicate that your home has a dock. Is that correct?

☐ Yes ☐No ☐DK ☐ NA

We're doing a survey of dock owners along the coast to see better understand their opinions and how they use their docks. I've got some questions to ask you that should take four or five minutes. Can we include you?

Can you tell me how long you've lived in our present home? _____ Years

Did you buy the home with a dock or build the dock since you moved in?

☐ Yes ☐No ☐DK ☐ NA

Can you tell me approximately how old your dock is? _____

Is your dock in need of major repairs?

☐ Yes ☐No ☐DK ☐ NA

Have you lived along the coast your entire life?

☐ Yes ☐No ☐DK ☐ NA

(If No): Where did you live before moving to the coast? _____

What county do you live in? _____

What is your zip code? _____

Would you describe the area where you live as **urban, suburban or rural**? (circle one)

Do you live in a-neighborhood that has covenant restrictions on what you can do with your property like restricting storage buildings and fences?

☐ Yes ☐No ☐DK ☐ NA

As I read this list, please tell me if your dock is located on:

☐ Inland Waterway (Intracoastal)
☐ Bay or sound
☐ Creek

Is your dock:

- ☐ Dry at low tide
- ☐ 1-4 ft low tide
- ☐ >4 ft low tide
- Other: Specify _____

Can you tell me approximately how long the walkway to your dock is? _____ ft.

Does your dock have: (check all that apply)

- ☐ Fixed (non-floating) deck (Size): _____
- ☐ Floating deck (Size) _____
- ☐ Boat lift
- ☐ Cover (roof)
- ☐ Railing

As I read the list, please tell me which you keep on your dock. (Record all)

- ☐ Power Boat Length _____ Horsepower _____
- ☐ Sail Boat Length _____ Motor HP _____
- ☐ Row Boat
- ☐ Jet ski
- ☐ Canoe
- ☐ Kayak

During the warm months, do you use your dock

- ☐ Daily
- ☐ 3-4 Times a week
- ☐ Once a week
- ☐ 3-4 Times a month

During the warm months, what do you PRIMARILY use your dock for

- ☐ Power Boating _____
- ☐ Sail Boating _____
- ☐ Jet Skiing _____
- ☐ Other Boating (sail or row) _____
- ☐ Fishing _____
- ☐ Swimming _____
- ☐ Crabbing _____
- ☐ Shrimping _____
- ☐ Nature watching _____

During the cooler months, do you use your dock

- ☐ Daily
- ☐ 3-4 Times a week
- ☐ Once a week
- ☐ 3-4 Times a month

During the cooler months, what do you PRIMARILY use your dock for

- ☐ Power Boating _____
- ☐ Sail Boating _____
- ☐ Jet Skiing _____
- ☐ Other Boating (sail or row) _____
- ☐ Fishing _____
- ☐ Swimming _____
- ☐ Crabbing _____
- ☐ Shrimping _____
- ☐ Nature watching _____

Do you think your dock adds to the value of your property?

☐ Yes ☐No ☐DK ☐ NA

If Yes): By approximately how much? _____

Is your dock in need of major repairs?

☐ Yes ☐No ☐DK ☐ NA

As I read from the following list, can you tell me the approximate value of your house and land?

- ___ less than $100,000
- ___ $100,000 to $250,000
- ___ $250,000 to $500,000
- ___ $500,000 to $1 million
- ___ More than $1 million

Now, I'd like to ask you a few questions about docks along the coast.

Do you think anyone who owns property on the water should be able to build a dock?

☐ Yes ☐No ☐DK ☐ NA

Do you think society should regulate when and where private docks can be built?

☐ Yes ☐No ☐DK ☐ NA

(If Yes) Who do you think should regulate docks—state government or local government?

☐ State ☐ Local ☐ DK ☐ NA

Do you think restrictions should be placed on the length of docks?

☐ Yes ☐No ☐DK ☐ NA

(If Yes): What do you think should be the maximum permitted length of a dock? _____

Do you think restrictions should be placed on how big docks can be?

☐ Yes ☐No ☐DK ☐ NA

Do you think restrictions should be placed on whether or not docks can be built with roofs or other coverings?

☐ Yes ☐No ☐DK ☐ NA

Do you think dock owners should pay a fee in order to build a dock?

☐ Yes ☐No ☐DK ☐ NA

(If Yes): Do you think the fee should be a one-time permit fee or dock owners should be required to pay an annual fee?

☐ One-time ☐Annual ☐ DK ☐ NA

How much should the dock owner pay? $_____

Thinking just about docks, not how they are used, do you think they are harmful to the aquatic environment?

☐ Yes ☐No ☐DK ☐ NA

Do you think the boating uses generally associated with a dock are harmful to the aquatic environment?

☐ Yes ☐No ☐DK ☐ NA

Do you think docks take away from the enjoyment of views of salt marshes, creeks and rivers?

☐ Yes ☐No ☐DK ☐ NA

(If Yes) Do you think views could be improved by limiting how close docks can be to each other?

☐ Yes ☐No ☐DK ☐ NA

(If Yes) Do you think views could be improved by limiting how long docks can be?

☐ Yes ☐No ☐DK ☐ NA

Do you think that there are too many docks?

☐ Yes ☐No ☐DK ☐ NA

(If Yes): Do you feel that community or common docks between several homes are an effective way to control the proliferation of docks?

☐ Yes ☐No ☐DK ☐ NA

Are there kinds of places where docks should not be allowed?

☐ Yes ☐No ☐DK ☐ NA

(If Yes): Can you tell me where that might be?

Appendix 2: Frequency tables for responses to survey questions

1.) Can you tell me how long you've you lived in your present home?

Mean	13.7
Median	10.0
Mode	3.0
Minimum	1.0
Maximum	86.0

2.) Did you buy the home with a dock or built the dock since you moved in?

	Count	*Percent*
Built	244	57.7
Existing	179	42.3
Total	423	100.0

3.) Can you tell me approximately how old your dock is?

Mean	13.3
Median	10.0
Mode	10.0
Minimum	.1
Maximum	100.0

4.) What county do you live in?

	Count	*Percent*
Beaufort	100	23.6
Berkeley	2	.5
Charleston	223	52.7
Colleton	4	.9
Dorchester	1	.2
Georgetown	83	19.6
Horry	8	1.9
Jasper	2	.5
Total	423	100.0

5.) What is your zip code?

6.) Is the area you live in: urban, suburban or rural?

	Count	*Percent*
Urban	66	15.8
Suburban	209	50.0
Rural	143	34.2
Total	418	100.0

7.) As I read this list, please tell me if your dock is located on:

	Count	*Percent*
Bay or sound	15	3.6
Creek or river	349	82.7
Inland waterway	58	13.7
Total	422	100.0

8.) Is your dock?

	Count	*Percent*
Dry at low tide	122	29.3
1-4 ft. at low tide	152	36.5
>4 ft. at low tide	137	32.9
Other	6	1.4
Total	417	100.1

9.) Is the width of the water where your dock is located greater than 50 feet?

	Count	*Percent*
Yes	273	64.7
No	139	32.9
Don't know	10	2.4
Total	422	100.0

10.) Can you tell me approximately how long the walkway to your dock is (in ft.)?

Mean	138.3
Median	75.0
Mode	100.0
Minimum	0.0
Maximum	1000.0

11.) Does you dock have …

a. Fixed (non-floating) deck?

	Count	*Percent*
Yes	255	60.3
No	168	39.7
Total	423	100.0

b. Floating deck?

	Count	*Percent*
Yes	304	71.9
No	119	28.1
Total	423	100.0

c. Boat lift?

	Count	*Percent*
Yes	107	25.3
No	316	74.7
Total	423	100.0

d. Cover (roof)?

	Count	*Percent*
Yes	94	22.2
No	329	77.8
Total	423	100.0

e. Railing?

	Count	*Percent*
Yes	221	52.2
No	202	47.8
Total	423	100.0

12.) Do you keep a powerboat (motorboat) at your dock?

	Count	*Percent*
Yes	198	46.8
No	225	53.2
Total	423	100.0

Can you tell me its length?

Mean	19.5
Median	18.0
Mode	17.0
Minimum	6.0
Maximum	70.0

Can you tell me its horsepower?

Mean	139.6
Median	115.0
Mode	25.0
Minimum	4.0
Maximum	880.0

During the warmer months, how often do you use your powerboat?

	Count	*Percent*
Daily	22	11.1
3-4 times a week	68	34.3
Once a week	59	29.8
1-2 times a month	36	18.2
Less than once a month	13	6.6
Total	198	100.0

During the cooler months, how often do you use your powerboat?

	Count	*Percent*
Daily	4	2.0
3-4 times a week	16	8.2
Once a week	33	16.8
1-2 times a month	80	40.8
Less than once a month	63	32.1
Total	196	100.0

13.) Do you keep a sailboat at your dock?

	Count	*Percent*
Yes	28	6.6
No	395	93.4
Total	423	100.0

Can you tell me its length?

Mean	26.3
Median	25.0
Mode	14.0
Minimum	12.0
Maximum	60.0

Can you tell me its horsepower?

Mean	25.2
Median	6.0
Mode	0.0
Minimum	0.0
Maximum	120.0

During the warmer months, how often do you use your sailboat?

	Count	*Percent*
Daily	4	14.3
3-4 times a week	6	21.4
Once a week	6	21.4
1-2 times a month	4	14.3
Less than once a month	8	28.6
Total	28	100.0

During the cooler months, how often do you use your sailboat?

	Count	*Percent*
Daily	0	0
3-4 times a week	1	3.7
Once a week	4	14.8
1-2 times a month	2	7.4
Less than once a month	20	74.1
Total	27	100.0

14.) Do you keep a jet ski at your dock?

	Count	*Percent*
Yes	14	3.3
No	408	96.7
Total	422	100.0

During the warmer month, how often do you use your jet ski?

	Count	*Percent*
Daily	2	14.3
3-4 times a week	3	21.4
Once a week	4	28.6
1-2 times a month	1	7.1
Less than once a month	4	28.6
Total	14	100.0

During the cooler months, how often do you use your jet ski?

	Count	*Percent*
Daily	0	0
3-4 times a week	0	0
Once a week	0	0
1-2 times a month	2	14.3
Less than once a month	12	85.7
Total	14	100.0

15.) Do you keep any of the following at your dock?

a. Row Boat

	Count	*Percent*
Yes	41	9.7
No	382	90.3
Total	423	100.0

b. Canoe

	Count	*Percent*
Yes	33	7.8
No	390	92.2
Total	423	100.0

c. Kayak

	Count	*Percent*
Yes	65	15.4
No	358	84.6
Total	423	100.0

16.) Other than boating, during the warm months, what do you PRIMARILY use your dock for (check only one)?

	Count	*Percent*
Crabbing	84	20.5
Fishing	106	25.9
Nature watching	129	31.5
Other boating (canoe, kayak…)	20	4.9
Shrimping	18	4.4
Swimming	53	12.9
Total	410	100.0

17.) Other than boating, during the cooler months, what do you PRIMARILY use your dock for (check only one)?

	Count	*Percent*
Crabbing	19	5.0
Fishing	87	22.8
Nature watching	239	62.6
Other boating (canoe, kayak…)	19	5.0
Shrimping	10	2.6
Nothing	8	2.1
Total	382	100.0

18.) During the warm months, how often do you use your dock?

	Count	*Percent*
Daily	157	37.2
3-4 times a week	135	32.0
Once a week	61	14.5
1-2 times a month	45	10.7
Less than once a month	24	5.7
Total	422	100.0

19.) During the cooler months, how often do you use your dock?

	Count	*Percent*
Daily	32	7.7
3-4 times a week	76	18.2
Once a week	111	26.6
1-2 times a month	113	27.1
Less than once a month	85	20.4
Total	417	100.0

20.) Do you share a dock with any other home?

	Count	*Percent*
Yes	37	8.7
No	386	91.3
Total	423	100.0

21.) As I read from the following list, can you tell me the approximate value of your house and land?

	Count	*Percent*
Less than $100,000	7	1.9
$100,000 to $250,000	48	13.2
$250,000 to $500,000	129	35.3
$500,000 to $1 million	136	37.3
More than $1 million	45	12.3
Total	365	100.0

22.) Do you think anyone who owns property on the water should be able to build a dock?

	Count	*Percent*
Yes	253	59.8
No	135	31.9
N/A	7	1.7
Don't know	28	6.6
Total	423	100.0

23.) Do you think society should regulate when and where private docks can be built?

	Count	*Percent*
Yes	258	61.1
No	140	33.2
Don't know	24	5.7
Total	422	100.0

Who do you think should regulate docks—state government or local government?

	Count	*Percent*
State	91	35.5
Local	143	55.9
Both	11	4.3
Neither	1	.4
Don't know	10	3.9
Total	256	100.0

24.) Do you think restrictions should be placed on how big docks can be?

	Count	*Percent*
Yes	318	75.4
No	89	21.1
N/A	1	.2
Don't know	14	3.3
Total	422	100.0

What do you think should be the maximum permitted length of a dock?

Mean	357.2
Median	300.0
Mode	300.0
Minimum	10.0
Maximum	1500.0

	Count	*Percent*
Depends	54	38.3
Location (Impact and size of water)	40	28.4
Size of property	3	2.1
Whether it harms others	1	.7
Current regulations	1	.7
Don't know	42	29.8
Total	141	100

25.) Do you think restrictions should be placed on how big docks can be?

	Count	*Percent*
Yes	329	77.8
No	76	18.0
N/A	3	.7
Don't know	15	3.5
Total	423	100.0

26.) Do you think restrictions should be placed on whether or not docks can be built with roofs or coverings?

	Count	*Percent*
Yes	153	36.2
No	247	58.4
N/A	4	.9
Don't know	19	4.5
Total	423	100.0

27.) Do you think dock owners should pay a fee in order to build a dock?

	Count	*Percent*
Yes	134	31.8
No	280	66.4
N/A	1	.2
Don't know	7	1.7
Total	422	100.0

Do you think the fee should be a one-time permit fee or dock owners would be required to pay an annual fee?

	Count	*Percent*
Annual	12	9.1
One-time	117	88.6
Don't know	3	2.3
Total	132	100.0

How much should the dock owner pay?

Mean	161.2
Median	100.0
Mode	50.0
Minimum	1.0
Maximum	1000.0

	Count	*Percent*
Depends	9	32.1
Cost of construction	1	3.6
Length of dock	1	3.6
Property value	1	3.6
Size	4	14.3
Permit costs	1	3.6
Type of dock	1	3.6
Value	1	3.6
$1/ft	2	7.1
$200/ft	1	3.6
Percentage of cost of constr.	1	3.6
1% cost of construction	1	3.6
10% cost of construction	2	7.1
Same as deck	1	3.6
Several thousand	1	3.6
Total	28	100.0

28.) Thinking just about docks, not how they are used, do you think they are harmful to the aquatic environment?

	Count	*Percent*
Yes	70	16.6
No	335	79.4
N/A	2	.5
Don't know	15	3.6
Total	422	100.0

29.) Do you think the boating uses generally associated with a dock are harmful to the aquatic environment?

	Count	*Percent*
Yes	157	37.1
No	245	57.9
N/A	5	1.2
Don't know	16	3.8
Total	423	100.0

30.) Do you think docks take away from the enjoyment of views of salt marshes, creeks and rivers?

	Count	*Percent*
Yes	79	18.7
No	326	77.3
N/A	4	.9
Don't know	13	3.1
Total	422	100.0

Do you think views could be improved by limiting how close docks can be to each other?

	Count	*Percent*
Yes	72	90.0
No	8	10.0
Total	80	100.0

Do you think views could be improved by limiting how long docks can be?

	Count	*Percent*
Yes	67	85.9
No	8	10.3
N/A	1	1.3
Don't know	2	2.6
Total	78	100.0

31.) Do you think that there are too many docks?

	Count	*Percent*
Yes	96	22.7
No	305	72.1
N/A	1	.2
Don't know	21	5.0
Total	423	100.0

Do you feel that community or common docks between several homes are an effective way to control the proliferation of docks?

	Count	*Percent*
Yes	76	80.9
No	16	17.0
Don't know	2	2.1
Total	94	100.0

32.) Are there kinds of places where docks should not be allowed?

	Count	*Percent*
Yes	322	76.1
No	76	18.0
N/A	2	.5
Don't know	23	5.4
Total	423	100.0

Can you tell me where docks should not be allowed?

	Count	*Percent*
Depends	5	1.6
Don't know	20	6.6
Narrow waterway	82	27.0
Protected areas, including marshland	78	25.7
Public areas	5	1.6
Restricts navigation	48	15.8
Too many docks/congested	66	21.7
Total	304	100.0